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Fitness Amigo: A Smart Diet Planner

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Abstract: ***According to the report of World Health Care 2019, there are more than 50 million people facing issue of health and diseases due to lack in care of food intake as well as lack of diet plan. However, the human body requires a combination of proximate and several macronutrients, micronutrients, vitamins, and minerals and Fitness Amigo is the ideal application for the above purpose. The aim of this project is to calculate BMI and provide diet charts according to the BMI Index. It provides options for both the Vegetarian and Non-Vegetarian diet of people. Fitness Amigo helps you to generate accurate diet chart with just some few clicks and the interface is very easy to use.***
Keywords: Body mass index, Java Application, Diet charts.

I. INTRODUCTION

Smart Diet Planner is an application dedicated to generating a personal diet plan. It provides a different set of features. It generates its meals based on a given Body Mass Index (BMI), in conjunction with a certain diet type, goal, and activeness. To deal with this problem we here are proposing an algorithm which will calculate BMI and suggest diet according to the index. Malnutrition can disrupt our daily life and well-being and reduce our ability to live a happy and active life. These unhealthy eating habits can affect your nutrition, including energy (or calories) protein, carbohydrates, essential fatty acids, vitamins and minerals as well as fiber and fluid.

In the short term, improper nutrition can lead to stress, tiredness and our ability to work, and over time, it can contribute to the risk of development of some illnesses and other health problems such as:

A. Being overweight or obese
B. Tooth decay
C. High blood pressure
D. High cholesterol

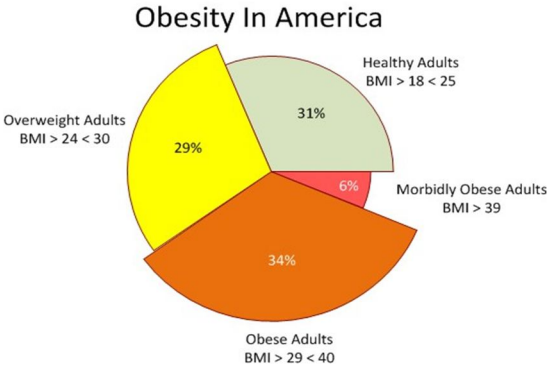

Fig. 1(BMI index of people in USA)

Ironically, a person who eats thousands of calories a day may not be getting the nutrients he or she needs to stay healthy. If your diet consists of fast foods, you are missing out on essential vitamins and minerals found in fresh fruits and vegetables. The consequences are disastrous. For example, vitamin A deficiency can led to blindness, and vitamin C deficiency can be the cause of a disease called scurvy, which leads to dental problems.

Meal planning helps to ensure you're eating a variety of different foods, and it can help you eat more fruit and vegetables, which can help reduce the risk of chronic lifestyle diseases. By following a proper diet plan, it will also help ensure you're eating habits and in the right portions.

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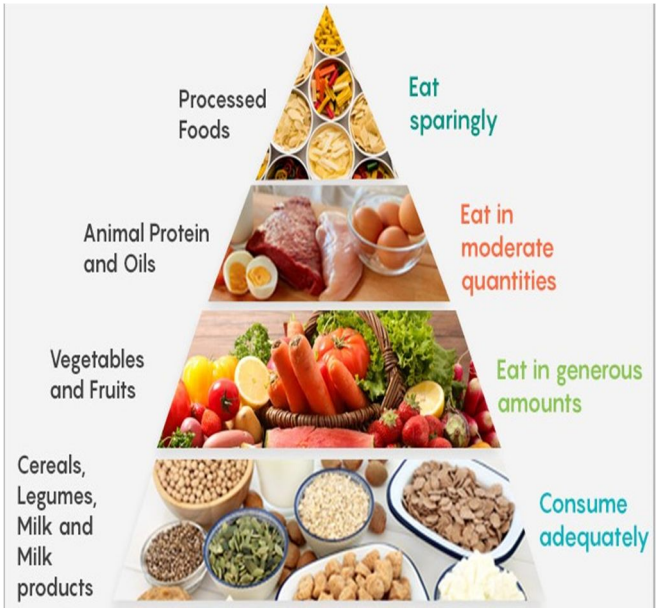
A healthy lifestyle can be achieved by maintaining a nutritious diet and taking into account all the essential nutrients needed by the body. A proper meal plan helps to attain ideal body weight and exactly Fitness Amigo come into picture to provide you with the proper diet chart which will you to keep your body healthy.

Fig. 2(Balanced Diet Chart)



II. FEATURES OF PROJECT

A. Application is user friendly, easy to handle and understand.
B. Accurate diet according to your BMI and sugar level with just few clicks.
C. Once registered you can easily access diet chart again and again according to your convenience without doing the process back again.
D. Data is stored in database hence there the application is light weight and does not requires more spaces.
E. Application is very secured and data stored is within the application so no third party can see your data.
F. Application also contains Email Id's and numbers of some expert Doctors for more assistance.

Table 1 (Literature Paper)

Name of paper	Published Date	Name of Publishers	Topics covered
SmartDiet: A diet consultant for healthy meal.	conference Paper October 2010	Henry Chang	The proposed diet planning approach not only translates nutrient recommendations into realistic dish choices.
Analysis and Design for Food Planner: Mobile app	December 2015	Afan Salman Sonya Manalu Natalia Chandra Anggi Gomis	Mobile application managing and tracking history of their food habits.
Diet and Physical Activity Apps	PMC April 2016	Qing Wang Bjorg Egelandsdal Gro Amdan Valerie Almli Marije Oostindjer	To study how the diet apps and physical activity apps are effective on their users and looks over how it influences the user activity.

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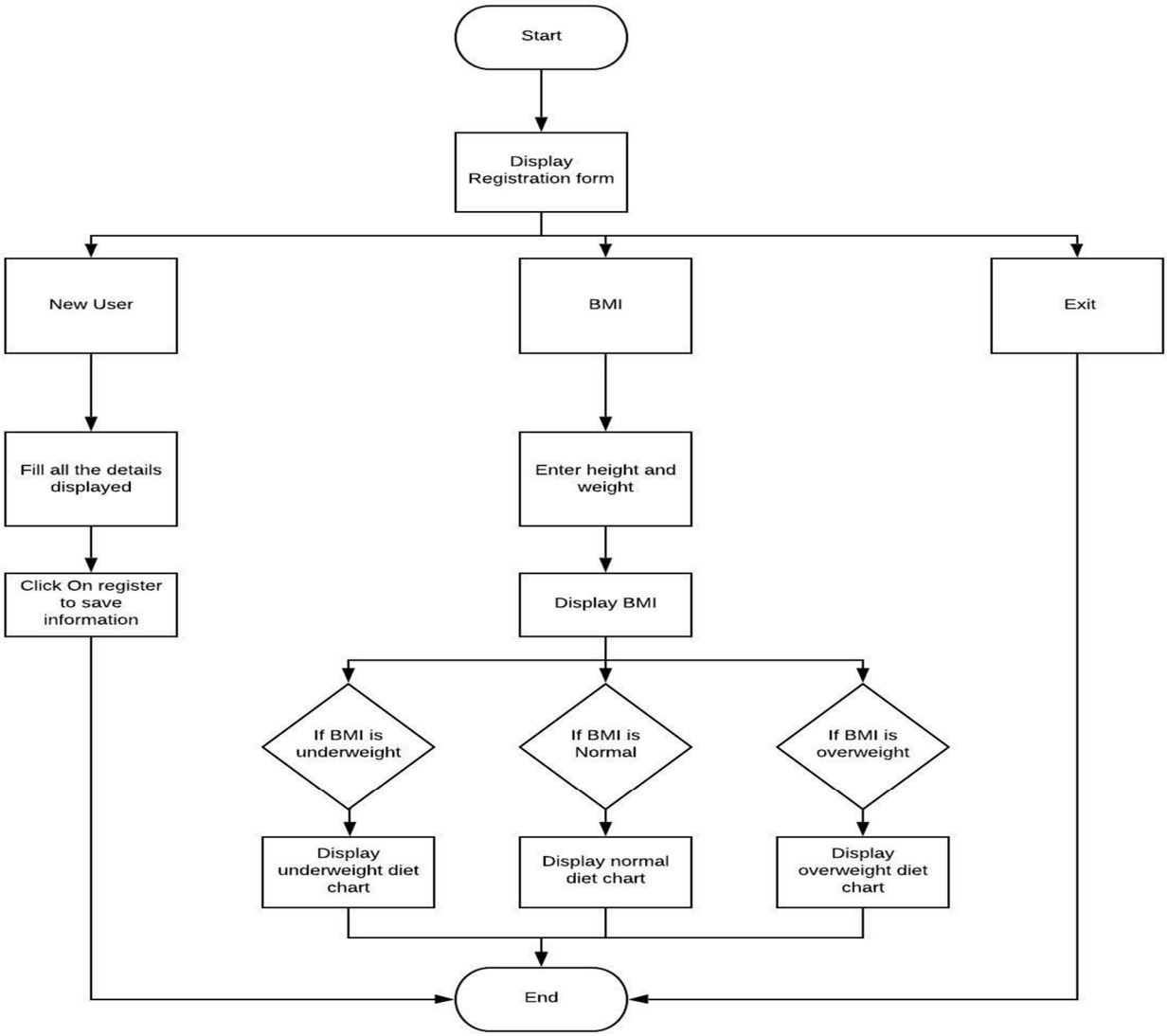

Fig. 3(Block Diagram)

III. PROPOSED SYSTEM

First, Registration form will be displayed. User has to select from the following choices:

A. New User

User has to enter Name, Mobile Number, Email address, Age, Sugar level, Blood Group, Height, Weight. After taking input, all the data would be saved in MySQL database.

B. BMI

User has to enter Height (in feet and inches) & weight (in pounds).
After taking input, BMI would be
Calculated and displayed on then screen. After the calculation of the BMI, If the BMI of the user is Normal or Overweight or Underweight accordingly the Diet plan will be Displayed.

C. Exit

Program will be terminated.

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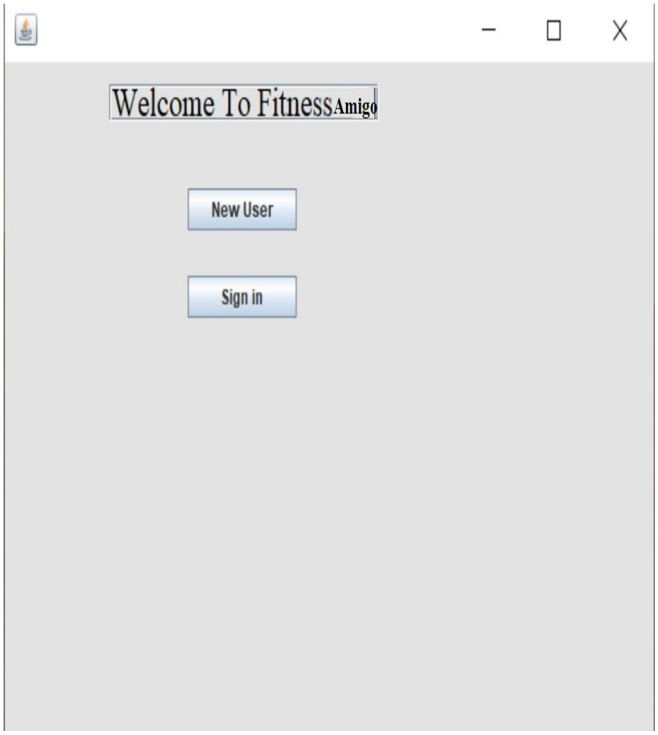
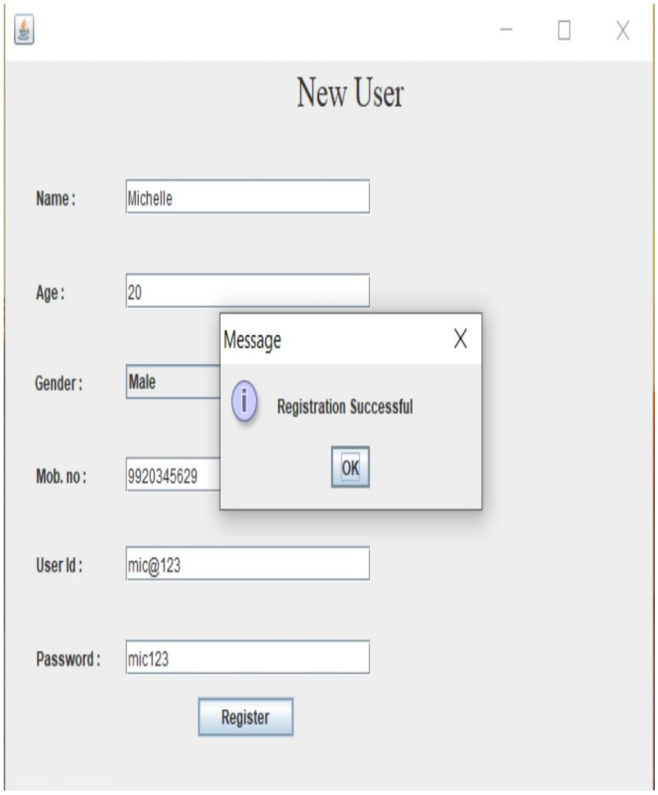
IV. RESULTS/OUTPUTS

A. Main Screen



B. User Registration Page



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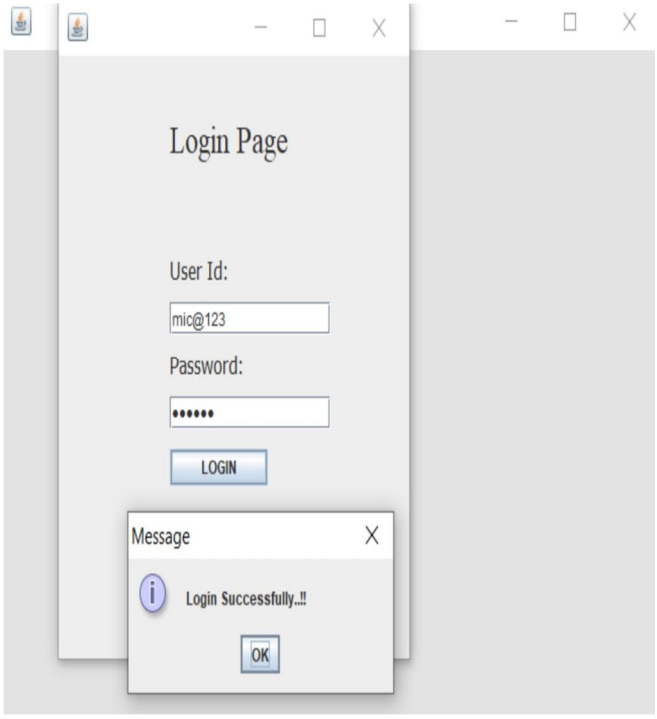
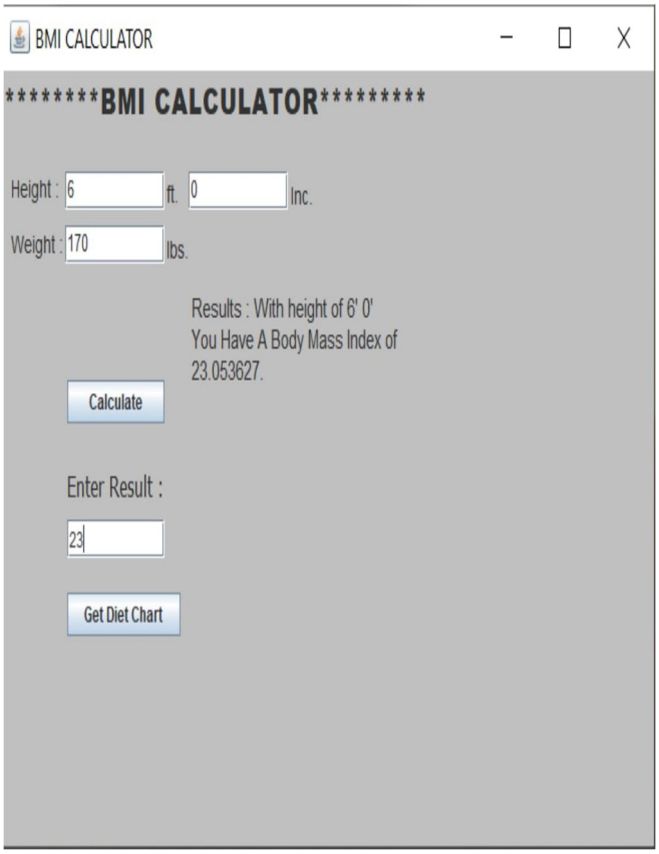
C. Login Page



D. BMI Calculator



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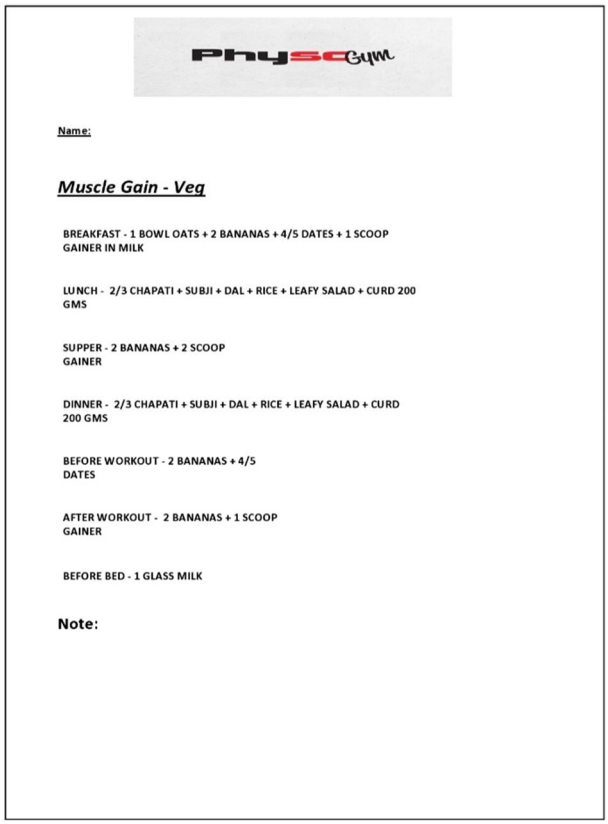
E. Diet Chart



PhyscGym

Name:

Muscle Gain - Veg

BREAKFAST - 1 BOWL OATS + 2 BANANAS + 4/5 DATES + 1 SCOOP GAINER IN MILK

LUNCH - 2/3 CHAPATI + SUBJI + DAL + RICE + LEAFY SALAD + CURD 200 GMS

SUPPER - 2 BANANAS + 2 SCOOP GAINER

DINNER - 2/3 CHAPATI + SUBJI + DAL + RICE + LEAFY SALAD + CURD 200 GMS

BEFORE WORKOUT - 2 BANANAS + 4/5 DATES

AFTER WORKOUT - 2 BANANAS + 1 SCOOP GAINER

BEFORE BED - 1 GLASS MILK

Note:

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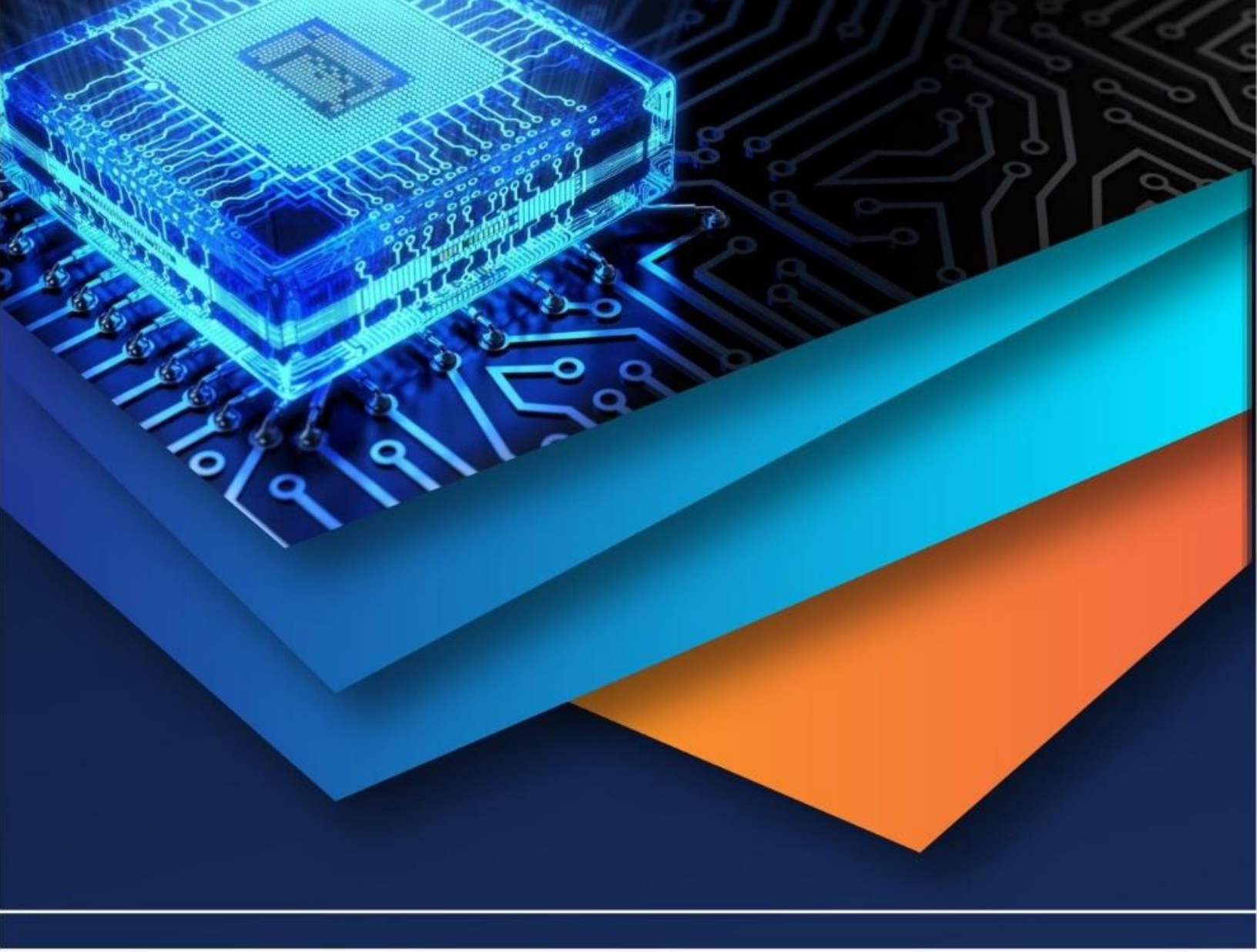

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